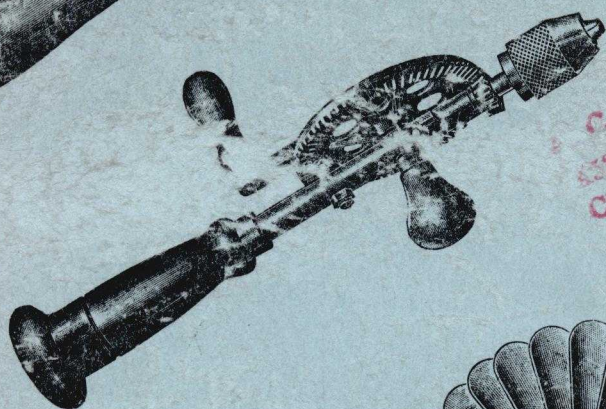
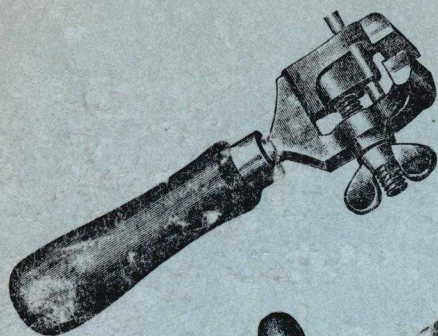
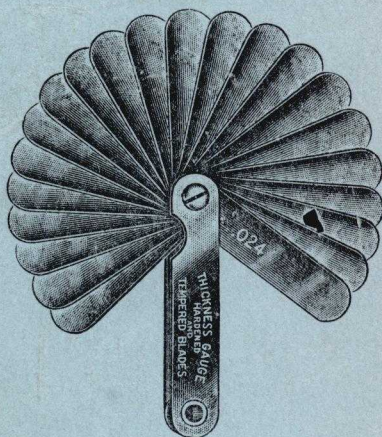


# MECHANICS' TOOLS

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C. CARSTENSEN  
6385 N. Sawyer Ave.  
CHICAGO, ILLINOIS



MANUFACTURED BY

## EINAR B. HANSON

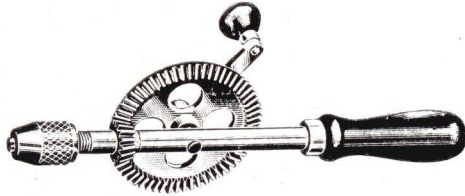
WORCESTER, MASS., U. S. A.

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## HAND DRILLS

No. 0 and 05 Hand Drill

### No. 0 Hand Drill

A light hand drill for small work. Solid handle with plain finish frame and chuck nut. Takes drill bits 0" to 3/16". Length 9 1/4". Packed one dozen to the carton. Weight 8 lbs. per doz.

No. 0 Hand Drills .....per doz.

### No. 05 Hand Drill

A light hand drill similar to No. 0. Solid handle with nickle plated frame and chuck nut. Takes drill bits 0" to 7/32". Packed one dozen to the carton. Weight 8 lbs per doz.

No. 05 Hand drills .....per doz.

### No. 1 Hand Drill

A hand drill for medium work. Solid handle with nickle plated frame and chuck nut. Takes drill bits 0" to 1/4". Packed one dozen to the carton. Weight 15 lbs. per doz.

No. 1 Hand Drills .....per doz.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

RECEIVED

APRIL 10 1954

TO

DR. J. R. OPPENHEIMER  
77 SOUTH MICHIGAN AVENUE  
ANN ARBOR, MICHIGAN

FROM  
DR. L. B. LOEHLER

RE: [illegible]

[illegible text]

[illegible text]



## HAND DRILLS



### No. 3 Hand Drill

A sturdy hand drill with hollow handle for holding drill bits. Takes drill bits 0" to 1/4". Nickel plated and buffed frame and chuck nut. Length 11 1/2". Packed one half dozen to the carton or in individual boxes. Weight 1 1/4 lbs. each.

No. 3 Hand Drills, 1/2 doz. in ctn. ....per doz.

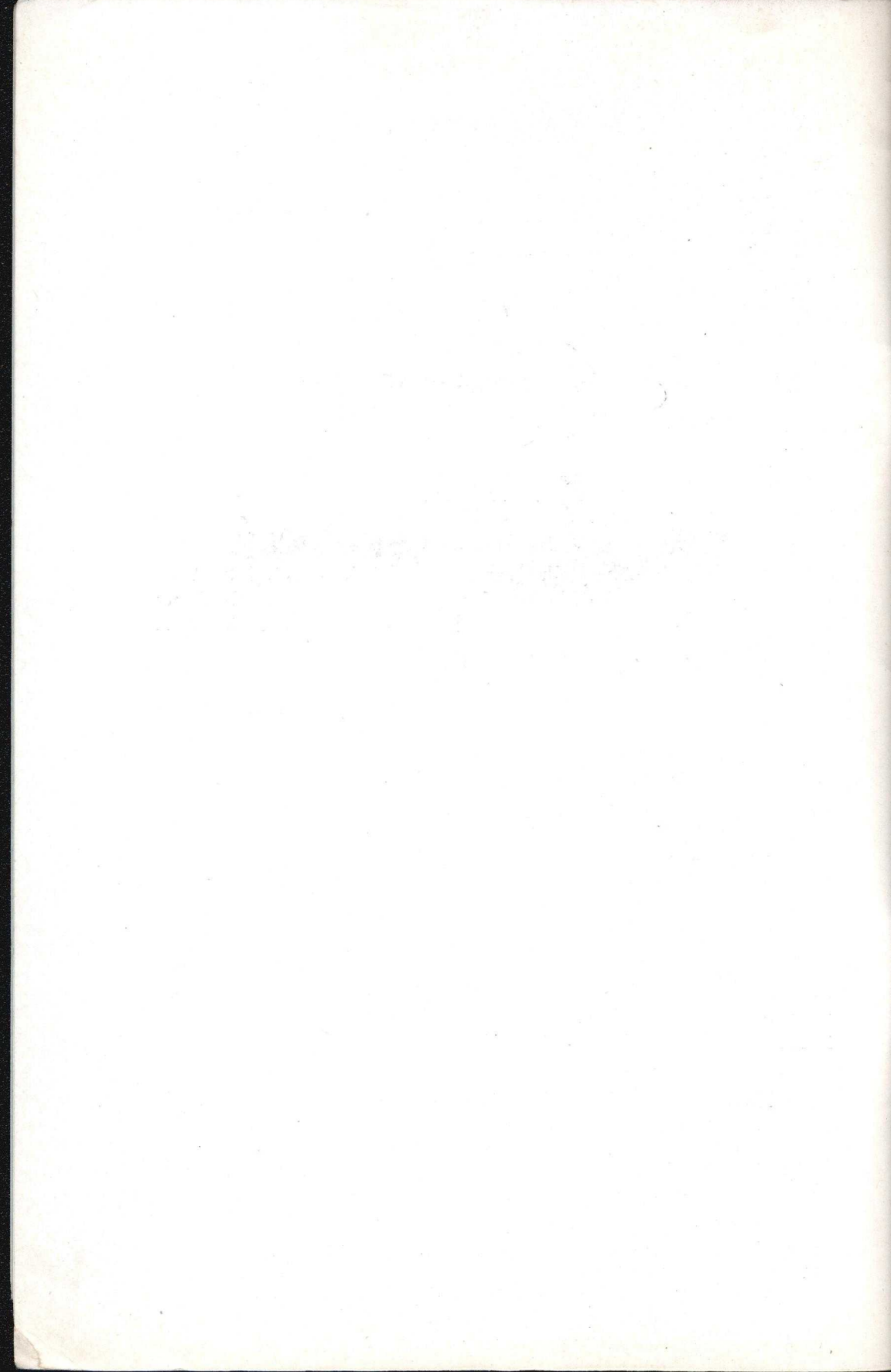
No. 3 Hand Drills, Ind. boxes .....per doz.

### No. 3BB Hand Drill

Same as No. 3 Hand Drill with the addition of ball thrust bearing at end of spindle and ball bearing take up on the large gears which takes the place of another pinion gear. Packed either 1/2 doz. to the carton or in individual boxes. Weight, 1-1/4 lbs. each.

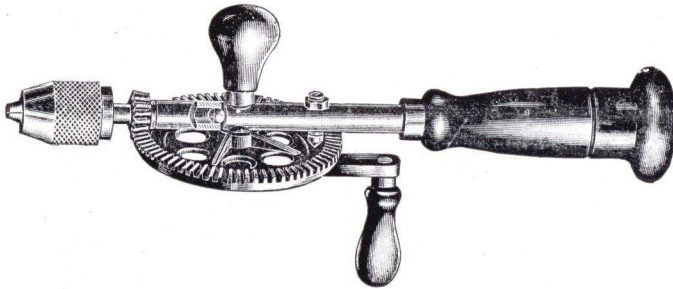
No. 3BB Hand Drills, 1/2 dz. to ctn. ....per doz.

No. 3BB Hand Drills, Ind. boxes .....per doz.



## HAND DRILLS

### No. 4 Hand Drill



A heavy duty hand drill with ball thrust bearing at end of spindle and ball bearing take up on large gear. Hollow handle for holding drill bits. Takes drill bits 0" to 3/8". Nickle plated and buffed frame and chuck nut. Length 13-1/4". Packed either 1/2 dozen to the carton or in individual boxes. Weight 2 lbs. each.

No. 4 Hand Drills, 1/2 doz. to ctn.....per doz.

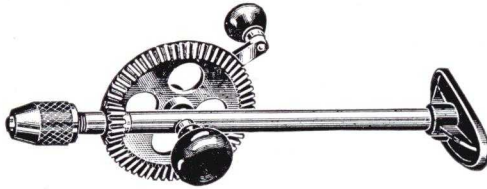
No. 4 Hand Drills, Ind. boxes .....per doz.

**A. C. CARSTENSEN**  
4538 N. Sawyer Ave.  
CHICAGO, ILLINOIS





## BREAST DRILLS



### No. 2 Breast Drill

A sturdy breast drill with 0" to 1/4" capacity. Nickle plated frame and chuck nut. Length 10 3/4". Weight 1 1/2 lbs. each. Packed either 1/2 dozen to the carton or in individual boxes.

No. 2 Breast Drills, 1/2 doz. to ctn. ....per doz.

No. 2 Breast Drills, Ind. boxes .....per doz.

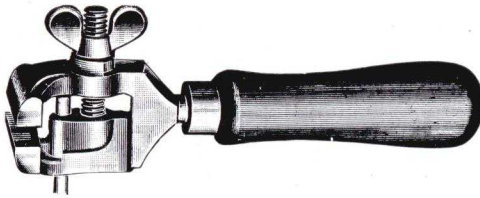
### No. 4 Breast Drill

A heavy duty breast drill with ball thrust bearing at end of spindle and ball bearing take up on large gear. Take drill bits 0" to 3/8". Nickle plated and buffed frame and chuck nut. Length 13 3/4". Weight 2 1/3 lbs. each. Packed either 1/2 dozen to the carton or in individual boxes.

No 4 Breast Drills, 1/2 doz. to ctn. ....per doz.

No. 4 Breast Drills, Ind. boxes .....per doz.

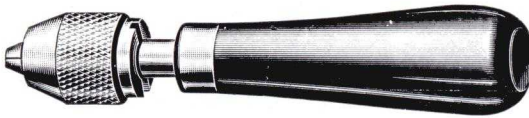




### Hand Vise

Hand vise is used for holding small pieces of work. Die cast jaws, steel guide pin and screw. Solid wooden handle. Weight 6 lbs. per dozen. Packed one dozen to the carton.

Hand Vise .....per doz.



### Pin Vise

A useful tool for holding files, small drills, reamers, awls, and screw bits. Chuck has three hardened jaws. Solid wooden handle. Two sizes available, 0" to 3/16", and 0" to 1/4". Packed one dozen to the box.

3/16 Pin Vises, Wgt. 3 1/2 lbs .....per doz.

1/4" Pin Vises, Wgt. 4 1/2 lbs. ....per doz.







## DRILL CHUCKS

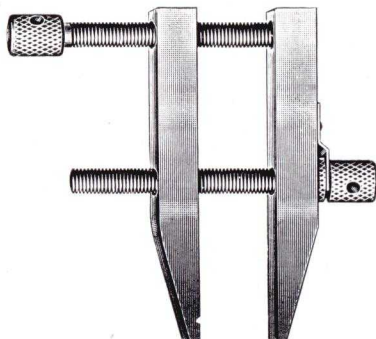
Drill chucks for use with a bit brace or in a lathe. Plain polished shank and nickle plated and buffed chuck nut. Chuck has three hardened steel jaws. Furnished in two types, round shank and bit brace shank. Adjustable from 0" to capacity. Packed one dozen to the box.

Size	Type of Shank	Wgt.	Price
3/16	Bit Brace	1 1/2 lbs	.....per doz.
3/16	Round	1 1/2 lbs	.....per doz.
1/4	Bit Brace	3 lbs.	.....per doz.
1/4	Round	3 lbs.	.....per doz.
3/8	Bit Brace	5 lbs.	.....per doz.
3/8	Round	5 lbs.	.....per doz.



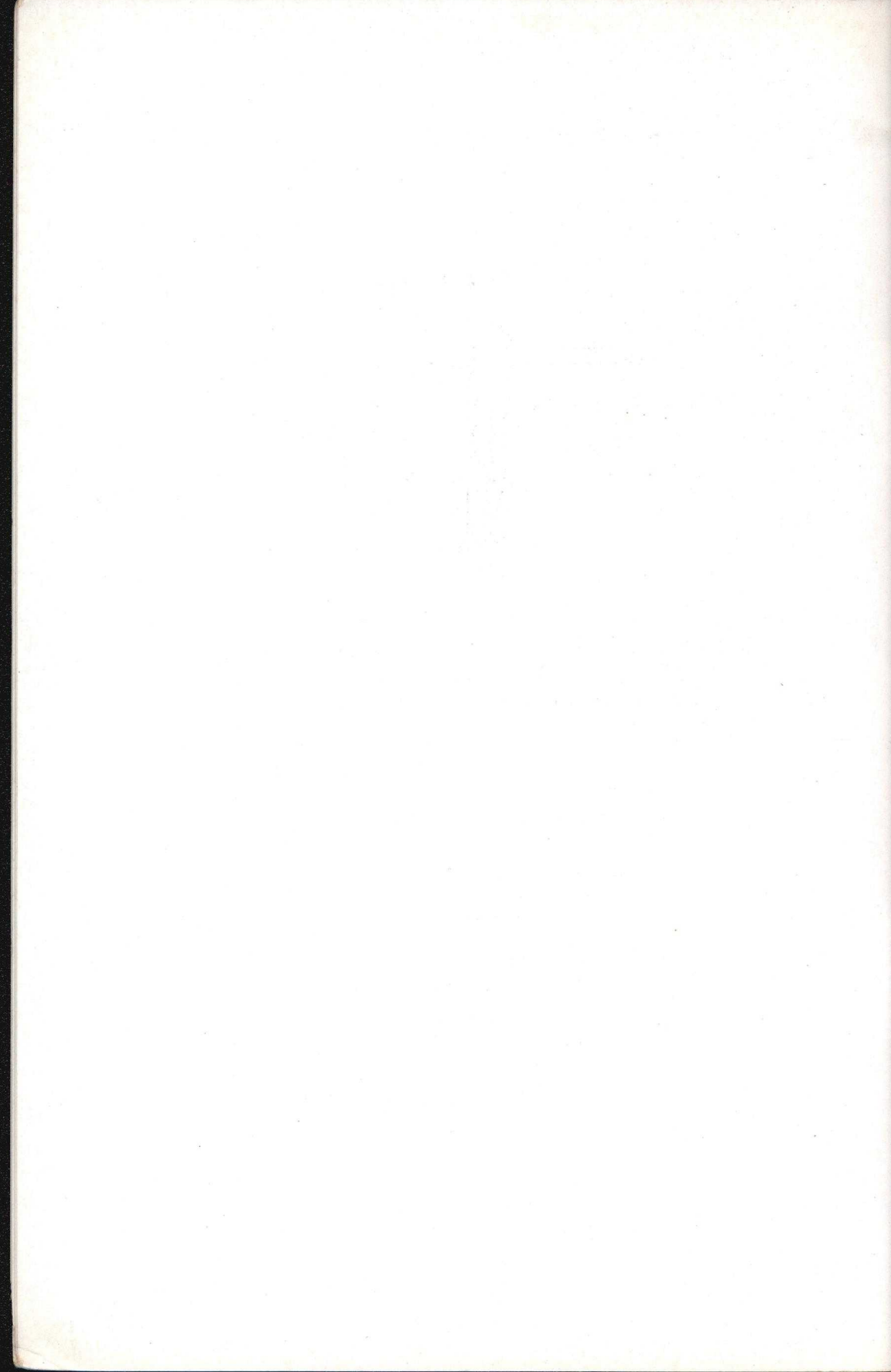


## MACHINISTS CLAMPS

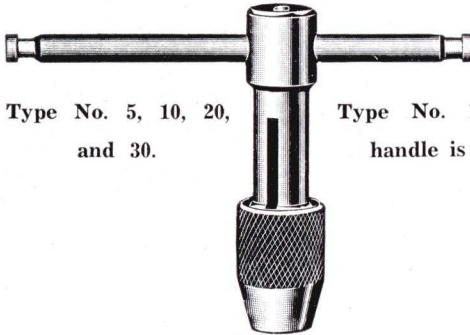


Machinists clamps are of the parallel jaw type. No. 2 and 3 have clip for holding loose jaw for quick adjustment. All clamps are made of steel with either plain, polished or hardened jaws. Indispensible to every machinist or home workshop owner.

No.	Cap.	Type Jaws	Wgt.	Price
0	0 —1"	Soft	2 lbs.	.....per doz.
1	0"—2"	Soft	8 lbs.	.....per doz.
2	0 —2 1/2"	Soft	18 lbs.	.....per doz.
1	0 —1"	Hard	2 lbs.	.....per doz.
2	0"—2"	Hard	8 lbs.	.....per doz.
3	0"—2 1/2"	Hard	18 lbs.	.....per doz.



## TAP WRENCHES



Type No. 5, 10, 20,  
and 30.

Type No. 1, 1-1/2  
handle is solid.

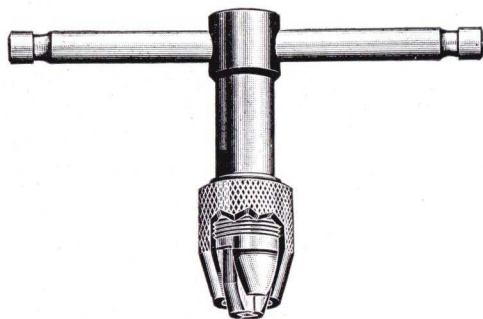
A complete line of tap Wrenches with either solid or sliding handles. Solid Type plain polished all over. Sliding handle type, nickled handle and body, blued nut. Packed one dozen to the box.

No.	Cap.	Type Hdle.	Wgt.	Price
1	6 x 32—10 x 24	solid	1 1/2 lbs.	.....per doz.
1 1/2	7/32—5/16	solid	3 lbs.	.....per doz.
2	1/4—1/2	solid	5 lbs.	.....per doz.
5	0"—6 x 32	sliding	1 1/2 lbs.	.....per doz.
10	6 x 32—10 x 24	sliding	1 1/2 lbs.	.....per doz.
20	7/32—5/16	sliding	3 lbs.	.....per doz.
30	1/4 —1/2"	sliding	5 lbs.	.....per doz.





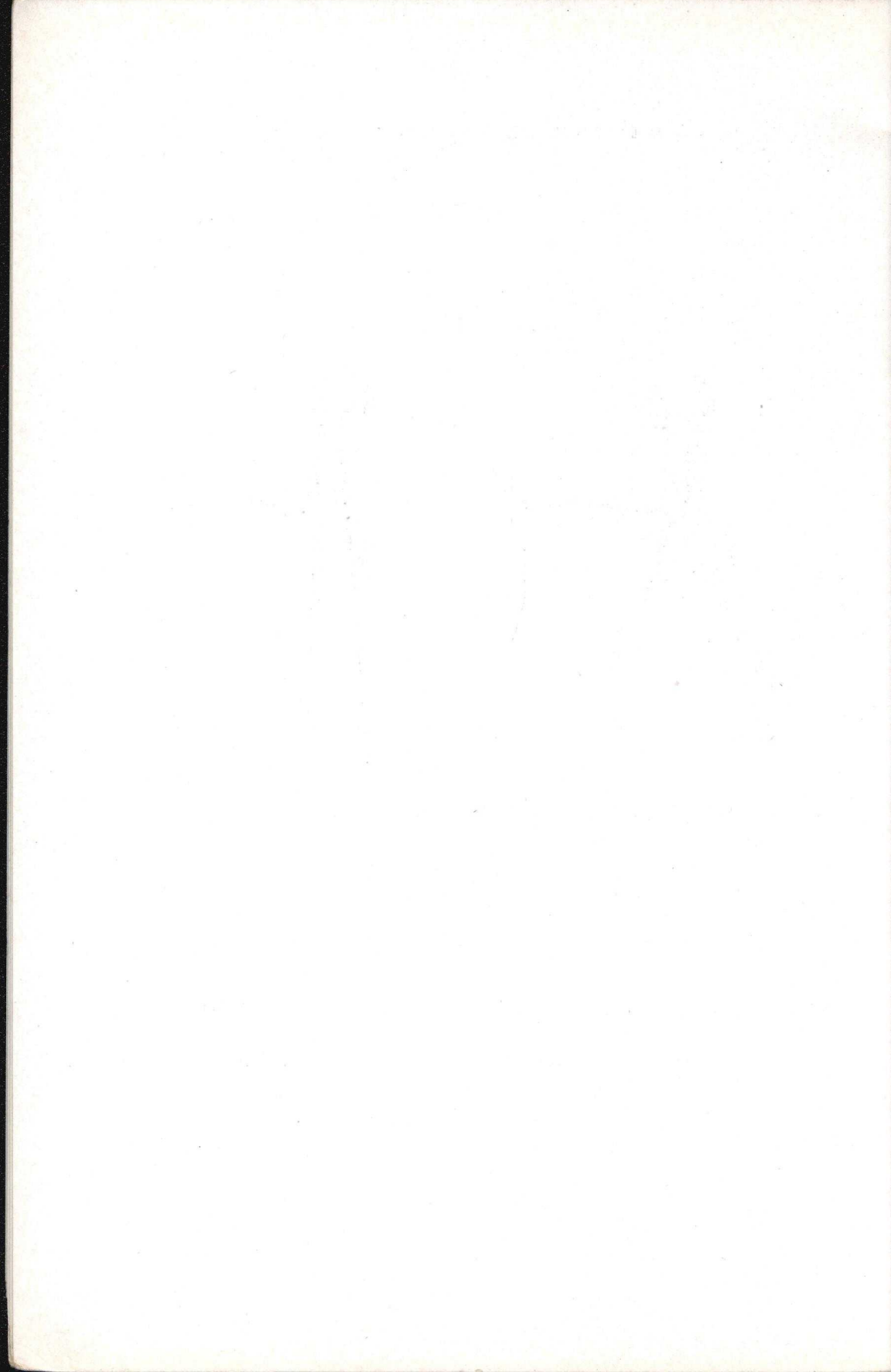
## TAP WRENCHES



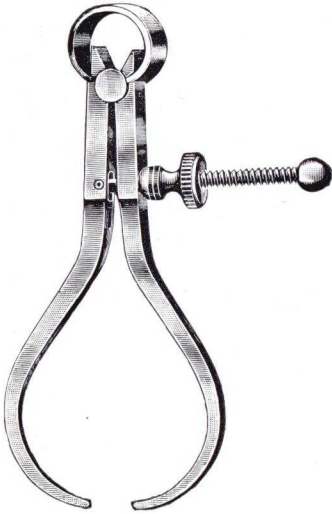
No. 40 and 50

The No. 40 and 50 Tap Wrench is a high quality tool. It is furnished with two hardened parallel steel jaws held with a spring. A sliding handle that can be held in three positions for best leverage. Nickel plated and buffed handle, body, and chuck nut. Packed 1 dozen to the box.

No.	Cap.	Wgt.	Price
40	1/4" to 1/2"	9 lbs.	.....per doz.
50	1/8" to 7/32"	6 lbs.	.....per doz.



## CALIPERS



**Outside Caliper**



**Inside Caliper**

The Outside and Inside Caliper answers the need of an inexpensive tool for the home workshop owner. Legs are die cast, held firmly with a tempered steel spring. They have a capacity of 4 inches. Can be furnished either plain cadmium finish or nickle plated and buffed. Packed one dozen to the box.

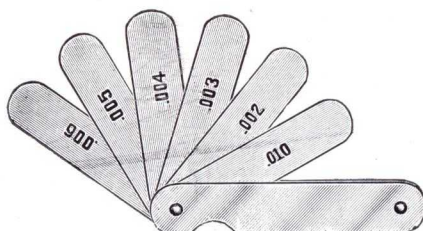
Calipers, cadmium finish	.....per doz.
Calipers, N/P and Buffed	.....per doz.





## THICKNESS GAUGES

Thickness gauges are furnished in a number of assorted sizes. Blades are made of hardened steel, ground to size. We solicit inquiries on special gauges.



### No. 6S Thickness Gauge

6 leaves — 2 5/16" long

Blades, .0002", .003", .004", .006", .008", .010". Packed one dozen to the box. Weight 1/2 lb. per dozen.

Price

.....per doz.

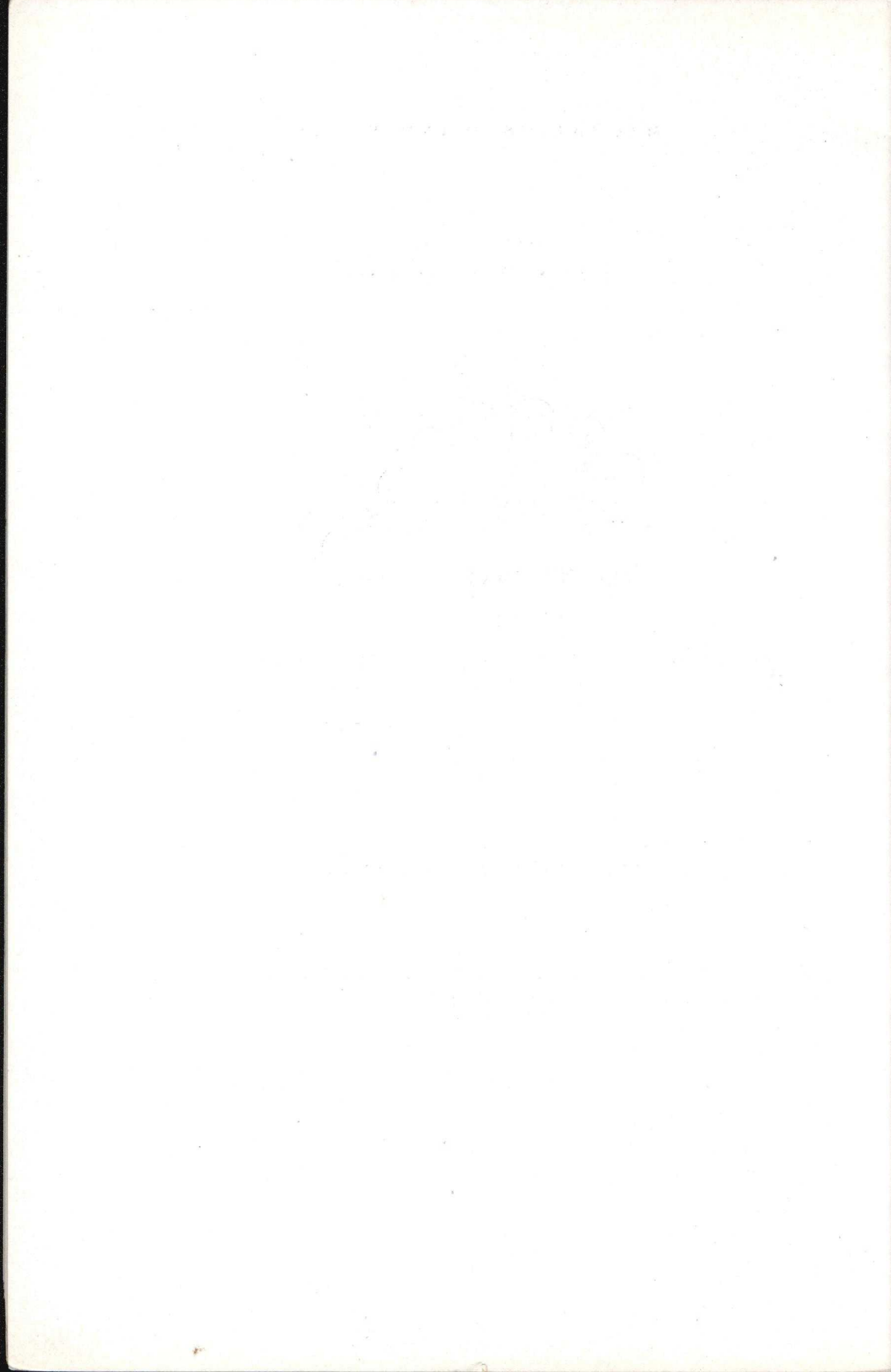
### No. 6W Thickness Gauge

6 leaves—2 5/16" long

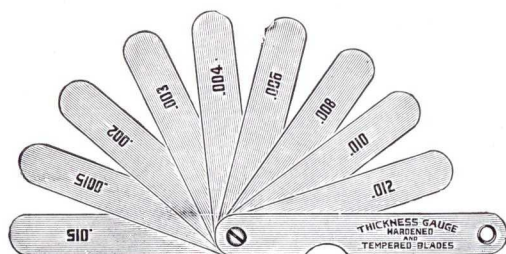
Blades, .004", .005", .006", .007", .008", .010". Packed one dozen to the box. Weight 1/2 lb. per dozen. Mounted on attractive display cards.

Price

.....per doz.



## THICKNESS GAUGES



### No. 30 Thickness Gauge

9 leaves — 3" long

Blades, .0015", .002", .003", .004", .006", .008", .010", .012", .015".  
Packed one dozen to the box. Weight 1 lb. per dozen.

Price

.....per doz.

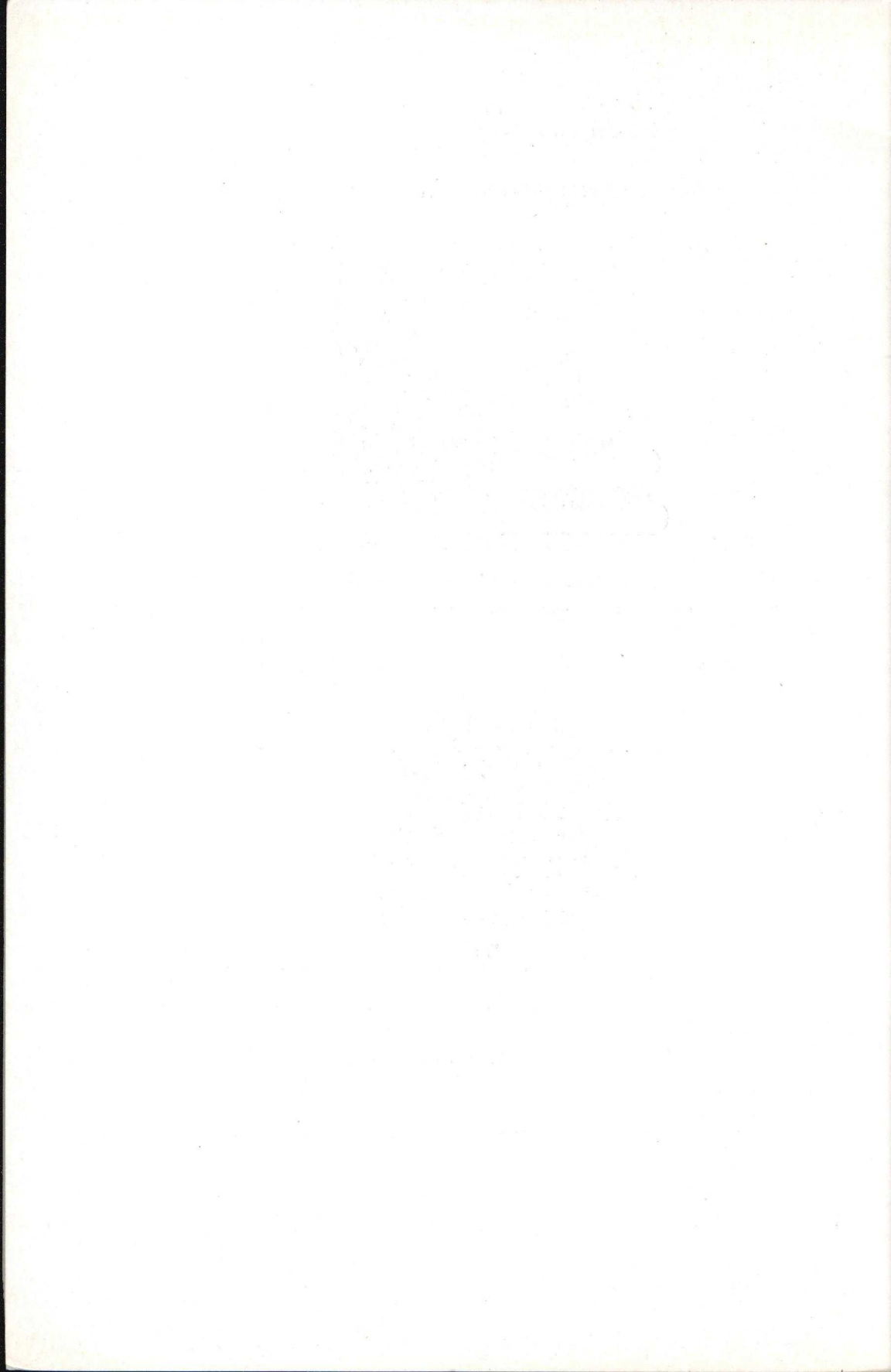
### No. 9R Thickness Gauge

9 leaves — 3" long

Same blades as No. 30 Thickness Gauge with addition of a 2" rule.  
Packed one dozen to the box. Weight 1 lb. per dozen. Mounted on attractive display cards.

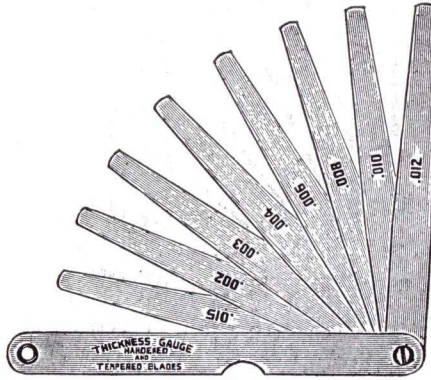
Price

.....per doz.





## THICKNESS GAUGES



### No. 45T Thickness Gauge

8 leaves — 6" long tapered

Blades, .002", .003", .004", .006", .008", .010", .013", .015". Packed one dozen to the box.

Price

.....per doz.



### No. 25 Thickness Gauge

25 leaves—2 5/16" long

Blade thickness, .0015" to .025" inclusive by thousands. Packed one dozen to the box.

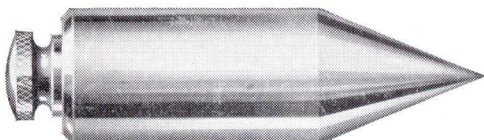
Price

.....per doz.

17/11/1911

17/11/1911

## PLUMB BOBS



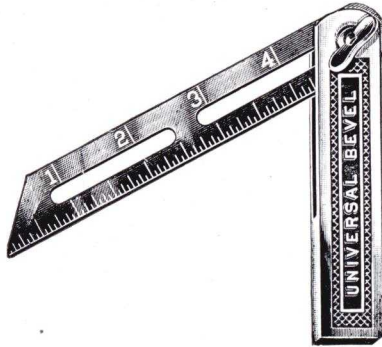
Made of steel. Cap recessed for holding string. Can be obtained either plain polished or nickled.

3 ounce, packed one dozen to box. Weight 2 1/2 lbs. per dozen.  
 5 ounce, packed one dozen to box. Weight 4 lbs. per dozen.  
 9 ounce, packed 1/2 dozen to box. Weight 6 lbs. per dozen.  
 12 ounce, packed 1/2 dozen to box. Weight 9 lbs. per dozen.  
 16 ounce, packed 1/2 dozen to box. Weight 12 lbs. per dozen.

No.	Wgt.	Polished	Nickled
3	3 oz.	.....	.....per doz.
5	5 oz.	.....	.....per doz.
8	8 oz.	.....	.....per doz.
12	12 oz.	.....	.....per doz.
16	16 oz.	.....	.....per doz.



## UNIVERSAL BEVEL



A useful tool for measuring angles. May also be used as a square. Blade graduated on reverse side with  $45^\circ$ ,  $60^\circ$ , and  $90^\circ$  angle marks. Blade cadmium plated and frame plain polished. Furnished either mounted on attractive display card or in bulk. Packed one dozen to the box. Bevels mounted on cards weigh 3 lbs. per dozen. Bevels in bulk weigh  $2 \frac{3}{4}$  lbs. per dozen.

Bevels on cards .....per doz.

Bevels not on cards .....per doz.





